Communicating

with Stakeholders about the

Risk Assessment Process

and

Results

Navy Environmental Health Center • Environmental Programs Directorate

Foreword

This guide was developed by the Navy Environmental Health Center (NEHC) specifically for Navy remedial project managers (RPMs), local installation restoration managers, cleanup contractors, health professionals, and legal and public affairs officers working as part of a team with regulators on risk assessment projects. It contains recommendations for partnering with stakeholders to promote meaningful two-way communication about conducting risk assessments and sharing risk assessment results. Sharing technical results can be challenging because the general public often lacks technical knowledge and may have different perceptions of what constitutes a risk. It's also challenging because you may be dealing with emotions rather than just data. This guide will help you overcome these challenges and encourage productive public participation in your risk assessment projects.

The concepts presented here are based on risk communication theory and principles. They can apply to a range of activities related to communicating about potential human health risks posed by hazardous waste sites, the risks/benefits of various cleanup alternatives for mitigating risks, and risks remaining after selected remedies are implemented. These concepts should be part of an ongoing and continuing public dialogue about appropriate ways to characterize risks and clean up environmental contamination at your sites.

The information provided in this document was selected primarily from the Health and Environmental Risk Communication (HERC) Workshops taught by both Fulton Communications and Dr. Vincent Covello for the Department of Defense (DOD). Communication principles and techniques formulated from Dr. Covello's research and Fulton Communication's experience with their clients' cases and case studies of other high-profile communications issues have been used to develop the foundation of the DOD HERC program. Additional materials were selected from the research of B. Fischhoff, C. Chess, P. M. Sandman, and B. J. Hance. This document is not a complete summary of risk communication literature, but a quick reference guide. It is meant to provide a framework of risk communication principles and associated tools to use when explaining risk assessments to the public.

For more information on risk communication and public dialogue, see the Navy Environmental Health Center Risk Communication Primer (www-nehc.med.navy.mil/HERC/Products/primer.pdf).

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Laying a sound foundation

Risk assessments are complex studies that use scientific and mathematical approaches that are not familiar to most members of the general public. This lack of understanding can be a huge barrier when discussing environmental or health issues. It can cause the public to be distrustful of you and your organization's study plans or results. So to increase the likelihood that your risk assessment will be acceptable to the public, you should ensure that your stakeholders understand the risk assessment process, including what types of questions can or cannot be answered by the risk assessment, before you present any results, facts, or figures.

Several preliminary activities can increase the likelihood that your risk assessment will be considered credible by the public:

- soliciting public involvement early in the process,
- targeting all affected stakeholders,
- encouraging interested members of the public to obtain risk assessment training, and
- ensuring that you and your team have received risk communication training.

All of these activities should be part of a comprehensive risk communication plan that identifies your stakeholder groups, their concerns or issues, and activities that will best help you interact and partner successfully with each of these various groups.

Your RAB is an invaluable tool—Use it

Involve your RAB

For most public involvement efforts, your local restoration advisory board (RAB) is key to ensuring local support for your project. Your RAB puts you in touch with the community at large as you and the RAB collaborate in planning and reviewing the risk assessment.

By explaining your project to the RAB early in the process and inviting RAB members to review your plan for conducting a risk assessment, you benefit in many ways. You demonstrate your commitment to public involvement, help build trust in the community regarding Navy/Marine Corps environmental operations, and ensure that your risk assessment will answer the Navy's questions and those the community considers the most

important. You should present your plans for conducting a risk assessment to the RAB and provide ample opportunities for the RAB to ask questions and provide input. Involving the RAB early in the process can help you avoid the mistake of conducting a risk assessment that is not responsive to the public's major concerns about a site.

The RAB can provide input on exposure issues such as:

- historical site activities and use,
- known or suspected off-site contamination,
- who might be using or visiting the site,
- lifestyle activities (e.g., fishing, hunting, gardening) that might result in exposure to contaminants, and
- future site use(s).

Examples of concerns the RAB may identify as community issues involving a particular site include:

- health and safety impacts,
- environmental impacts,
- economic impacts,
- impacts on sensitive populations, for example pregnant women or children,
- aesthetics,
- process for conducting the risk assessment,
- recreational impacts,
- impact on local property values, and
- cultural impacts.

The RAB can also serve as a testing ground for your risk communication messages as these messages are developed and revised during the risk assessment process.

Keep the RAB in the loop

At important junctures in the gathering and assessment of data, share information with the RAB. The RAB members want to be updated on how the risk assessment is progressing and whether preliminary data supports a cause for concern. Based on feedback from the RAB, you may need to clarify initial risk characterizations in light of data that has been collected.

For example, the data being collected might indicate the existence of a threat to human health. Even without complete data, the agency may decide to issue a warning to the public about the apparent danger and suggest ways to mitigate exposure while more data is being collected.

By communicating early and often with the RAB and other significant stakeholders, your actions are consistent with the Navy's message that we are open and honest about our environmental projects. Your willingness to share the process and its results demonstrates your good will and helps stakeholders gain trust in your project. Even if you don't have all the information you'd like, provide what you have and let the RAB know when you expect to have additional information and answers to their questions. Always develop realistic schedules. It is always easier to provide information early than it is to explain why you are behind schedule and need more time.

Target other stakeholders

All potentially affected parties need to be identified and targeted to receive risk information. Key stakeholders may include active duty personnel; Navy and Department of Defense civilian personnel; civilians and military dependents living near the site; local business owners and community residents; recreational users of the site; contractors; government agencies; and the educational, health, and safety communities. Work with your risk communication team and the RAB in identifying these stakeholders and in assessing their specific issues, concerns, and values.

Facilitate risk assessment training for stakeholders

Effective partnering with the RAB and other public stakeholders requires that they understand the basics of conducting a risk assessment and interpreting and using the results to make risk management decisions. Some materials designed to help the public gain a better understanding of the risk assessment process are listed in the bibliography section of this guide. Basic risk assessment training for RABs is one of the services the Navy Environmental Health Center is funded to provide. This training provides a general overview of the Navy's risk assessment process and policy. It is designed to help RAB members understand discussions and documents about the risk assessments done at their local sites. The training can be tailored for site-specific needs.

Exposure Assessment + Toxicity Assessment = Risk Characterization

Among the concepts introduced to the public during basic risk assessment training are the following:

- Definition of risk assessment—A human health risk assessment estimates the likelihood of health problems occurring as a result of exposure to hazardous substances at a site.
- Steps of Navy and U.S. Environmental Protection Agency (EPA) human health risk assessments:
  1. **Data Collection and Evaluation**—What levels of hazardous substances are present at a site?
  2. **Exposure Assessment**—What are the exposure pathways (breathing; touching; or consuming contaminated air, water, soil, or food) for different groups of people (children, site workers, residents, or the elderly, for example) to become exposed to

the identified hazardous substances? How long and how often have exposures occurred and what is the likelihood of future exposures?

3. **Toxicity Assessment**—How toxic, or harmful, is exposure to the identified contaminants? What kinds of health effects may be triggered by various levels of exposure to the hazardous substances at a site?
4. **Risk Characterization**—How are the results of the exposure assessment and the toxicity assessment combined to estimate the level of health risk posed by a site?

Make sure you get training too

All installation restoration, environmental management and health professionals, and legal and public affairs personnel should attend risk communication training and actively practice the skills they learn. Effective communication with stakeholders includes learning how to deal with emotional issues, misperceptions, misunderstandings, confusion, and different agendas. The Navy's Civil Engineer Corps Officers School (CECOS) offers a three-day workshop to provide basic knowledge and tools for effective communication with stakeholders of diverse interests about environmental risk and risk management issues. This workshop is offered by CECOS in conjunction with the

- Navy Environmental Health Center (NEHC),
- Army Center for Health Promotion and Preventive Medicine (CHPPM), and
- Air Force Institute for Operational Health (AFIOH).

Consult https://www.cecos.navy.mil to find out more about this course and how to register.

NEHC can also provide site-specific intermediate or advanced risk communication workshops.

Deciding on risk assessment messages

Before you present any risk information to stakeholders, you must develop goals and prepare messages to meet these goals. First, determine your primary reason for communicating with stakeholders. Is it to educate, change perceptions, gain consensus, raise awareness, or some other goal? Then think about what key information you need to convey to stakeholders to help you meet your goals. This key information needs to be condensed into a few (three or four) brief messages that are accurate, straightforward, easy to understand, and consistent. Your messages should also highlight accomplishments or future plans and be backed by two to four supporting facts. By repeating a consistent set of key messages throughout the communication process, you help the audience to remember and understand the information.

Here are some examples of key messages:

- The water is safe to drink.
- The water from your well may not be safe to drink. The Navy will continue to provide bottled water for you and your family until we know for sure.
- We will continue to monitor the air and provide the data.
- Seafood taken from the posted areas may be contaminated with PCBs. We recommend that you not eat seafood from these areas while we conduct more studies.
- We are doing what it takes to make sure the site is safe.
- We don't know, but we'll find out and get back to you...."

The NEHC Risk Communication Primer contains very helpful guidelines on how to develop good site-specific messages. In addition, NEHC risk communication specialists are available to assist Navy and Marine Corps personnel in developing appropriate key messages.

Get the team together

It's vital that all members of the Navy/Marine Corps team involved in communicating with the public about risks present a united front and put forth the same messages about the risks. To ensure clarity and consistency of risk information, bring all members of your project team together periodically to reach consensus on the risk assessment results, the content of the messages, and how the messages should be conveyed to the public. These meetings should involve the remedial project manager, the local installation restoration manager, cleanup contractors, relevant state or EPA regional regulators, and legal and public affairs officers.

After reaching consensus, the team should formalize their understanding of the risks, content of messages, and how these messages are to be conveyed in a written summary. Putting your team's understanding of the pertinent issues in writing is very important because you cannot assume that everyone has the same understanding of the results and messages based on group discussions alone. Even slight variations in the wording used to present results or conclusions can be disastrous if they highlight possible disagreements among agencies.

NEHC is funded to assist RPMs with reviewing risk assessments and developing and presenting accurate and appropriate key messages. By participating early as a team member in project meetings, NEHC can help guide and coordinate your public dialogue efforts and help you avoid conflicts with your stakeholders regarding risk assessment plans or results or any subsequent cleanup decisions.

Focus on risk management

People typically are not interested in all the numbers and details of a risk assessment. They are most often interested in finding out about what you're doing to identify and reduce risks. More than a technical discussion of how small or large the risk is, people want to know what you have done, are doing, and plan to do to reduce and manage the risk.

Explain your plans or results in easy-to-understand language with messages focused on highlighting the work that is being done to address the Navy's and the community's concerns. These will typically not be the same messages you would use to explain the process or results to your peers in the office.

Other environmental scientists or engineers would understand an explanation such as *"The risk assessment found excess cancer risks greater than 1×10^{-4} and, therefore, the health risks posed by exposure to the site are not acceptable based on EPA guidance, and remedial action is required."*

The average community member would not understand what is meant by "excess cancer risks," complex numbers such as 1 H 10^{-4}, or discussions about "acceptable" risks. The public typically wants to know if the site is safe as it is, or if it is unsafe. If it is unsafe, the public wants to know what the Navy is doing to fix the problem. Develop concise key messages that answer these basic questions and address their concerns.

Avoid using numbers

Because numbers are not second nature to most people, do not present risk-related numbers and statistics as you find them. Instead, explain results in terms of the big picture. People are generally interested not in what the number is, but in what it means to them. Once again, your messages will need to use words that address typical public concern, such as "Is the site safe or not safe as it is?", "Will the Navy be cleaning up the site?", or "What is the Navy planning to do to fix the problem?"

Although you should avoid using numbers in your key messages, you should always have appropriate documents on hand when explaining a risk assessment in case audience members insist on hearing and discussing the numbers. If this happens, encourage those interested to talk with you after the meeting, or at a later date have a one-on-one or small-group discussion of the numbers and what they mean.

If you are in a situation where you think you may have to use and explain numbers, you are strongly encouraged to contact the risk communication experts at NEHC for assistance. Discussing numbers can be disastrous if done poorly. You must put special planning into a communication strategy to avoid upsetting or confusing your audience.

Be cautious with risk comparisons

You may think that one way to give more reality to risk information is to compare an unfamiliar risk, such as cancer risk from exposure to contaminated soil, to a risk that is far more familiar, like the cancer risk from getting an X-ray during a checkup. Although these risk comparisons sound like a good idea, they can actually be very dangerous because people have different perceptions of the magnitude of a given risk. An action or behavior that one person considers safe or a low risk, another person may consider very risky and not worth the chance. If you look at the vast differences in diet and behavior choices among the American population (e.g., fat in the diet or wearing a seatbelt), it is easy to see that different people have different tolerances for risk in their lives and different perceptions of what is risky.

Acknowledge different perceptions of risk

Even when the public understands and accepts your assessment of a risk as low, the community may still not find the risk acceptable. In evaluating risks, the size of the risk is only one factor, and to the public, it may be less important than other factors. Deciding what level of risk is acceptable is not strictly a technical question, but a value question.

Here are some risk perception factors people often consider in evaluating the acceptability of risks:

- **Familiarity**—Is this a risk with which I'm familiar because I've heard or read about it or someone I know is coping with it?
- **Fairness**—Is the risk unfairly borne by me and the people in my neighborhood as opposed to being a risk that everyone faces?

- **Benefits**—Are there any benefits that come my way as a result of my assuming this risk?
- **Alternatives**—Are there any reasonable alternatives to assuming this risk?
- **Degree of control**—Is there anything I can do to minimize the risk?
- **Voluntariness**—Is this risk being imposed upon me, or is the risk something that I voluntarily assume?

Comparisons between risks that don't involve similar risk perception factors are the most dangerous. For example, if you were trying to explain why the installation of a new hazardous waste incinerator is safe or an "acceptable risk," you would not want to explain this new involuntary risk to a person living near the proposed site as comparable to a voluntary risk such as that associated with smoke and emissions from a backyard grill. Such comparisons make people feel that you are trying to manipulate their decision about what is risky and what is not.

Caution—Indiscriminate use of risk comparisons may be detrimental to your credibility!

Because most community groups, like the general public, are made up of diverse groups of people with different lifestyles and different established risk perceptions, it will be very difficult to identify a risk comparison that will not upset or irritate someone. If the public suspects that you are trying to minimize the risk level to gain public acceptance of site risks, you and your agency may lose the community's trust. Because of this possibility, the risk communication experts at NEHC recommend you use risk comparisons only to explain the magnitude of a number, not as a means to encourage stakeholder acceptance of a risk or your risk assessment results.

Compare risks to standards

A better and more acceptable comparison might be to describe a risk in relation to standards set by credible third parties. EPA and the Agency for Toxic Substances and Disease Registry are two agencies that set environmental and human health standards. When members of the public understand that a risk falls below a standard set by a trusted neutral party like these, they may be willing to accept that the risk is safe.

Explain risk management

When communicating with the public about the results of risk assessments, explain the risk management process and how risk assessment is a tool to help with this process. Four key points that should be explained are uncertainty, background risk, zero risk, and acceptable risk.

Uncertainty—Risk assessment is not an exact science. While risk assessors use the best available data on what is occurring or could occur at a site, they are calculating the likelihood of exposure to hazardous substances and the health consequences of such exposure. The results are probabilities, not certainties. To account for the uncertainties, risk assessors use conservative assumptions to avoid underestimating any threats.

- The best way to communicate about uncertainty is to give an example, such as drinking water exposure—"Different people drink different amounts of water, so we assume in our risk assessment that everyone is drinking a lot to make sure we are not underestimating the risk."
- Show through the example how the uncertainty is offset by the use of protective assumptions—"The default drinking water exposure for carcinogens is 1 liter per day, 350 days per year for 70 years."

Background risk—When communicating about a cleanup project, explain that the Navy's cleanup level will fall above background levels for particular contaminants. Chemicals exist in the environment at normal, or background, levels. It's impracticable for the Navy to clean to a level below the normal occurrence of that chemical in the local environment. The Navy cleans to levels considered acceptable, or safe, by EPA.

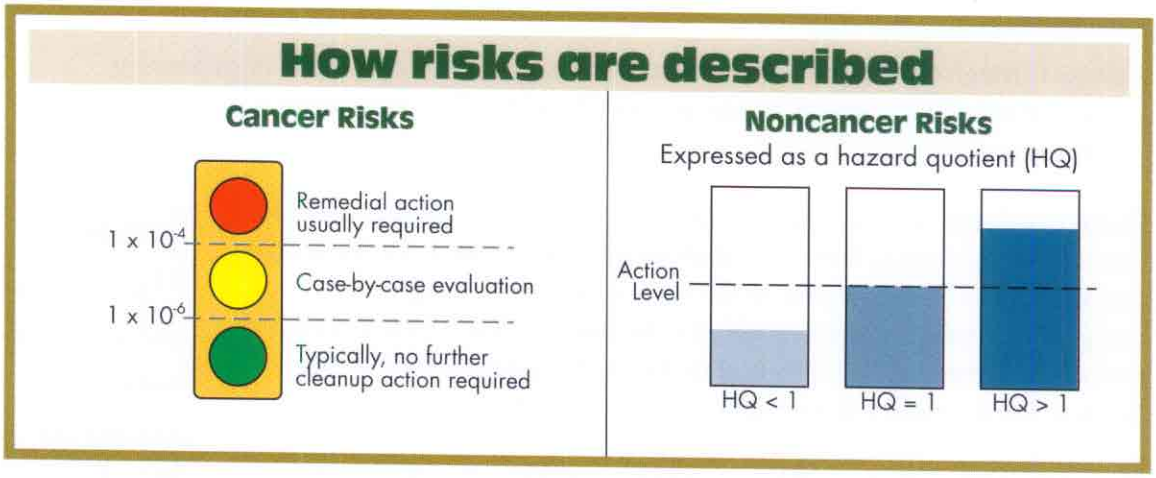
Zero risk—Although the public would like to believe that it's possible to assume no extra risks when deciding among various alternatives, the truth is that life involves risk—there are no zero-risk activities. The taking of risks is inherent in human activity, and there is no hope of reducing all risks to zero. The risk of a harmful outcome from almost any action or nonaction always exists, even if at an extremely low level. The Navy realizes that it's unrealistic to expect cleanup programs to reduce all risks to zero.

Acceptable risk—With the understanding that some risk is inevitable, the next step for the public to grasp is the level of risk that triggers a Navy cleanup action. The Navy uses a risk-based approach that EPA devised for deciding when to take action at Superfund sites. While it is important to convey to the public that the Navy and EPA believe all exposure to known carcinogens is risky, there are certain levels of chemical exposure that are considered too small to be a health concern—these small levels are considered safe, or "acceptable," levels.

Example:
High levels of arsenic occur normally in groundwater in Nevada. Realizing this, the Navy would not expect to entirely remove arsenic from groundwater or soil at Nevada sites but would instead aim to remove arsenic in excess of normal levels.

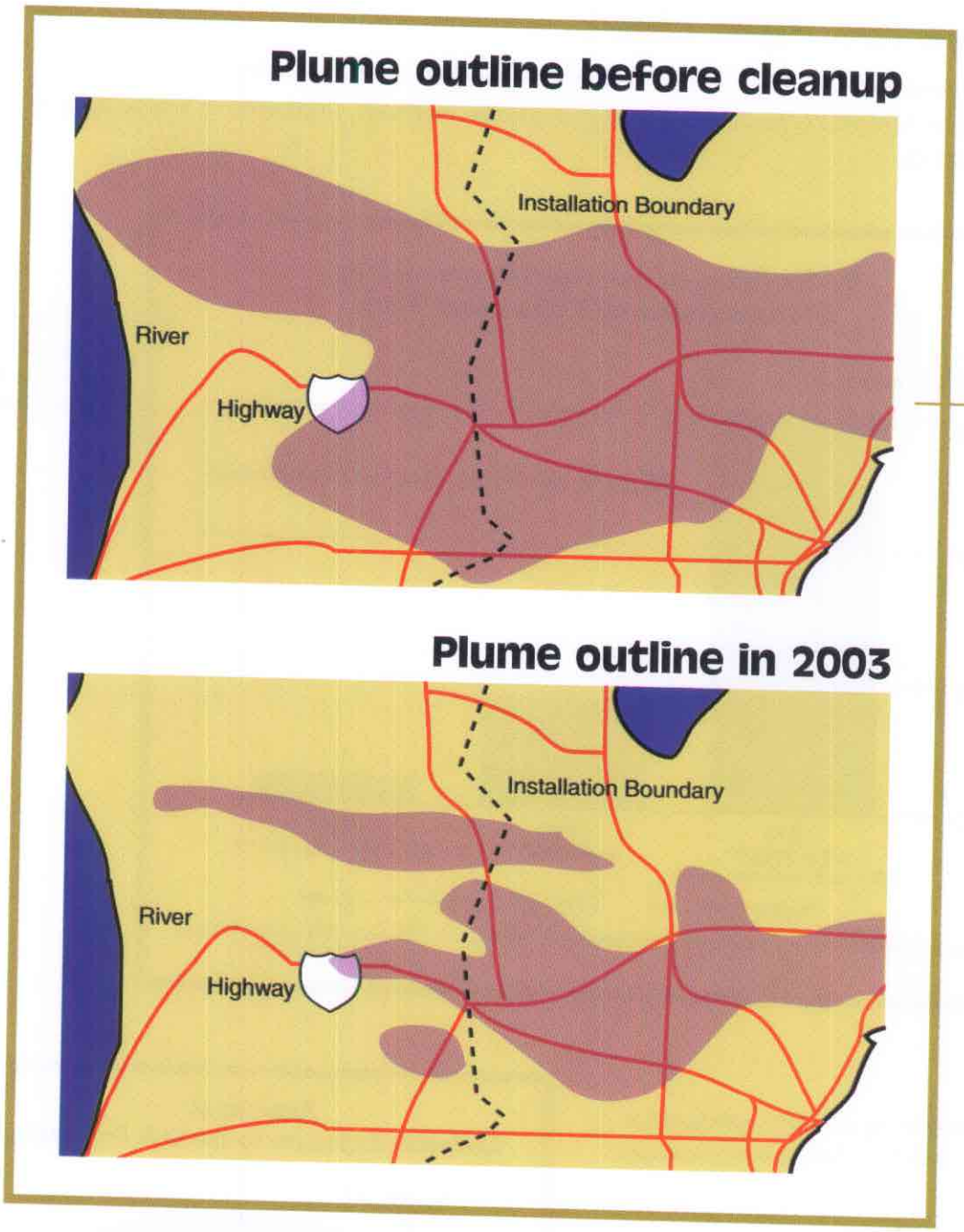
The Navy and EPA have decided that cleanup is justified when the risk of additional cancers from exposure to a particular contaminant at a site is greater than 1 in 10,000 (1×10^{-4}). A 1-in-10,000 chance means that the chance that an exposed individual might develop cancer would increase by 0.01% over a lifetime. When the risk of additional cancers from a contaminant is less than 1 in 1,000,000 (1×10^{-6}), the Navy usually decides this is an acceptable, or safe, level and decides against cleanup. Risks falling between these two levels (between 1×10^{-6} and 1×10^{-4}) are evaluated on a case-by-case basis.

The Navy uses hazard quotients to report risks associated with noncancer effects, such as rashes, eye irritation, breathing difficulty, organ damage, birth defects, or other conditions. When the hazard quotient is less than or equal to 1, harmful effects would not be expected for even the most sensitive populations. When the hazard quotient is greater than 1, the potential for harmful effects should be examined more closely and would lead the Navy to further study the risk or conduct a cleanup.



Depict risk data graphically

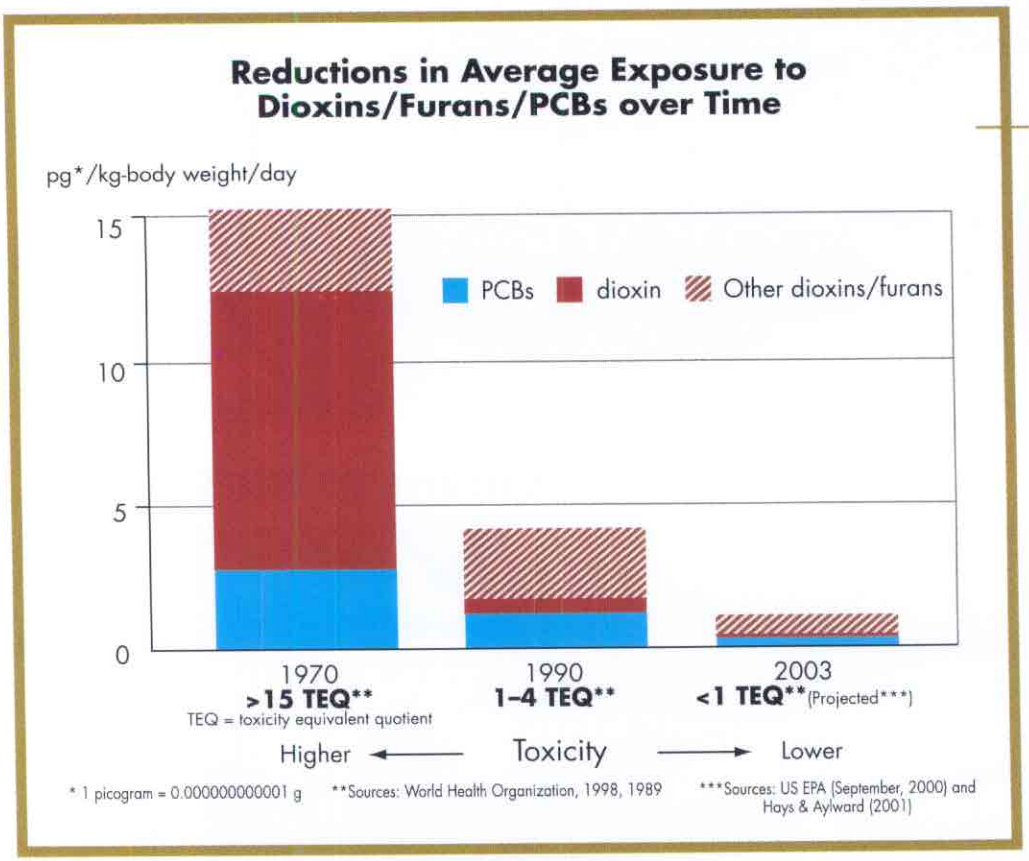
Graphical materials can help communicate your message. Select a chart, photograph, or graphic illustration to reinforce your key information. Keep your graphical materials simple, easy to understand, and focused on the main point or message. Poorly designed charts overloaded with data and filled with acronyms do not contribute to an audience's acceptance of your message and can actually make a bad situation worse.



Groundwater contamination resulting from the unlined landfill is being cleaned up. These before and after plume contour maps show that the cleanup project has reduced the size of the groundwater plume, which contains concentrations of contaminants that exceed federal and state drinking water standards.

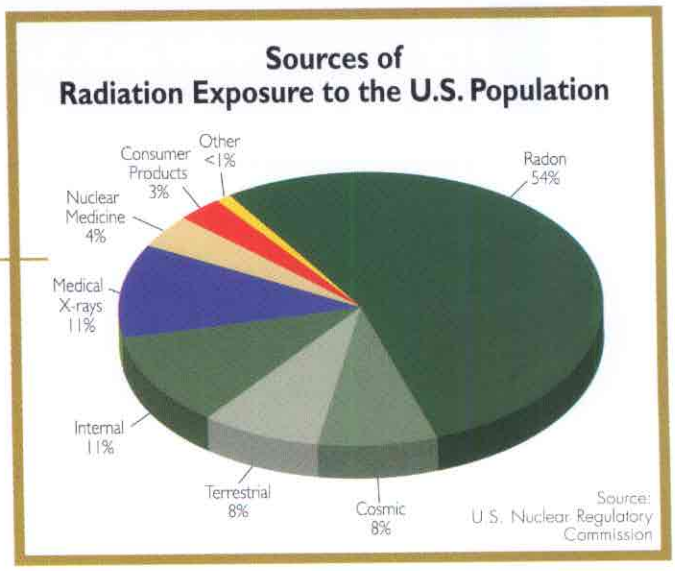
Select the right chart

A **time series chart** monitors change over time. Examples include column charts and curve charts. Use this type of chart to depict trends, increases, decreases, or fluctuation in some quantity.



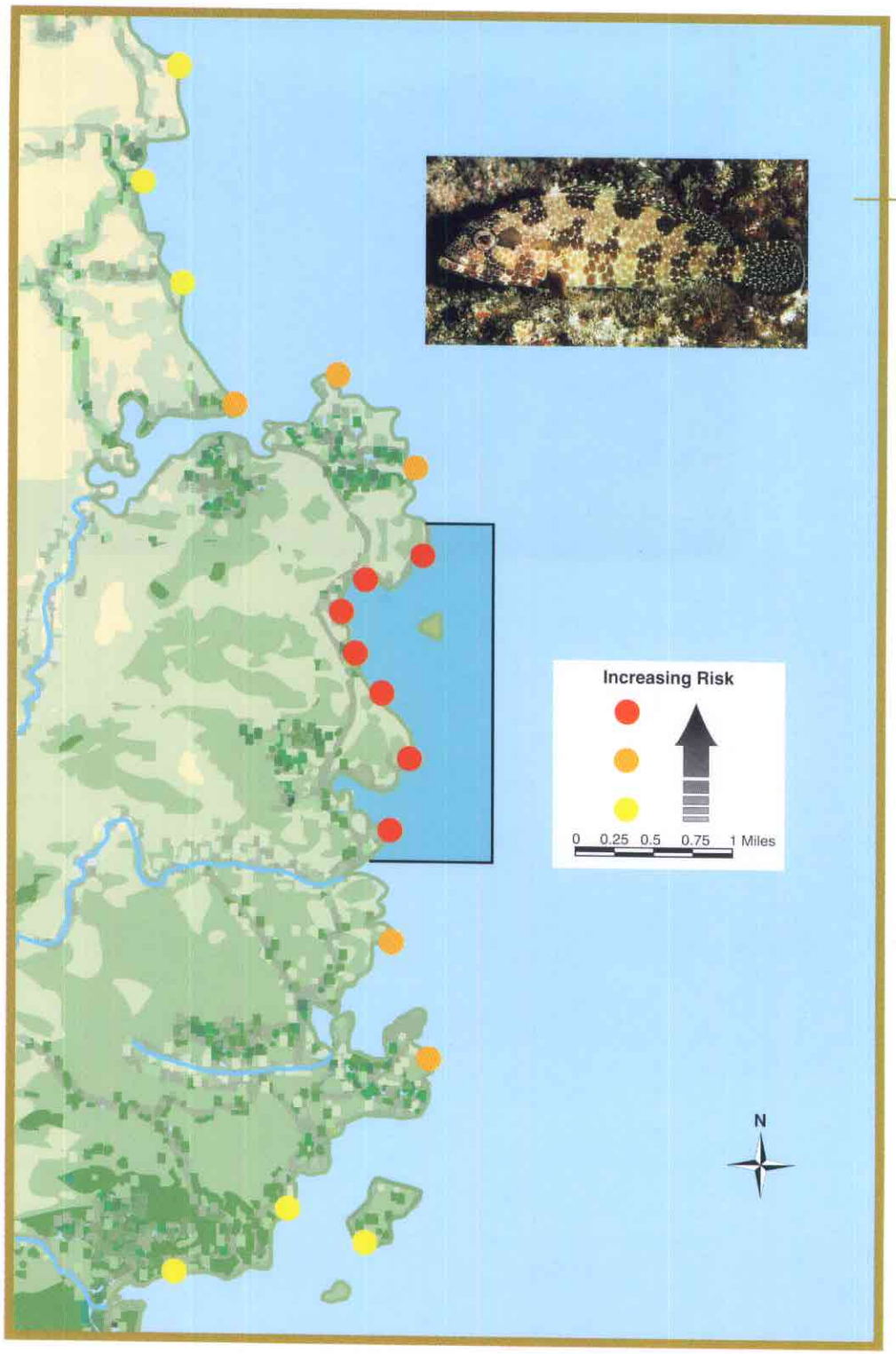
Exposure to dioxin is down dramatically.

A **pie chart** is an effective way to show the parts of the whole, or percentages.



For the general public, the majority of radiation exposure actually comes from natural sources (shades of green). This fact is often not known by the public.

A **map** shows how different places compare on some parameter and can get your message across without using numbers.



This map visually distinguishes boundaries of a seafood advisory area based on higher chemical contamination in fish, resulting in an increased health risk level.

The public prefers **photographs** as a way to get a message visually. While finding good representative photographs to support your key messages may be daunting, the public will appreciate your efforts.

Photo provided by Argonne National Laboratory–West

Phytoremediation involves planting trees or other vegetation to restore a site with low levels of contaminants.

Sharing your messages with stakeholders

You and your risk communication team will discuss and decide on the most effective communication channels for meeting the information needs of your stakeholders. Discussions with the RAB and stakeholders will uncover a range of channels preferred by the public for receiving information. Among the channels your team may consider are mass media, fact sheets, Web sites, and public meetings.

Plan a mass media campaign

Some audiences may prefer to receive information by reading the newspaper, watching local television news, or listening to the radio. Your team should cooperate with individual media sources, encourage coverage of your project, and be available for interviews or local talk show appearances.

Your team might consider crafting mutually agreed upon **press releases**. But since issuing a press release does not guarantee that the Navy's message will be reproduced as written, you can follow up press releases at crucial points in the communication process with **paid advertisements**. With a paid advertisement, the Navy controls what is said and the way it is presented. Paid advertisements can be used to publicize upcoming meetings, solicit public input or comments, or provide critical information. Advertising time can also be purchased from local radio stations. Most radio stations also provide information on environmental issues as public service announcements.

Before you release any information to the media or conduct any interviews, make sure you have consulted your Navy public affairs officer (PAO). Your PAO will likely need to review and approve any information released to the media and can provide vital guidance on how to prepare for and handle media interviews.

Another way the Navy can get its message out is to use an **editorial** written by the commander of the local installation. Because opinion pieces aren't edited, this strategy may work in communicating a complete message.

Radio and television talk shows are another format community members may find appealing for obtaining information about environmental issues because they offer two-way communication. At crucial points in your risk assessment, you may want to participate in a talk show to advertise public meetings, provide key information prior to a meeting, solicit input from the public on upcoming plans or activities, or discuss your key messages with the public. To familiarize yourself with the medium and sharpen your ability to think on your feet, get some media/spokesperson training. Even if your project is not the focus of a talk show, you can use the format to announce meeting plans or other critical information whenever possible.

Don't overlook the **base newspaper and television station** in getting out the story of your project. Since the Navy provides these two means of communication, they are good forums for providing more detailed material to help educate the public and encourage people to talk about the issues.

Produce and distribute fact sheets

A good way to provide more detailed information than is typically found in a newspaper article is a **fact sheet**. Fact sheets should be one to two pages in length, concise, and easy to understand. Be especially vigilant about keeping the technical information simple. Organize the technical details to support a few key messages. This format can satisfy the public's desire to receive more graphics, such as photographs, tables, and graphic illustrations to reinforce the key information. If a topic cannot be covered in two pages, then consider dividing the topic and producing more than one fact sheet.

Fact sheets can be organized around various risk assessment topics, key messages, or project milestones. They can be used to describe the risk assessment process for environmental pollutants, the pathways through which an individual may be exposed to pollutants, the way health risks are estimated, the status of ongoing health risk assessments, and recommendations for actions that decrease an individual's exposure to health risks. Fact sheets may provide a short background on what the Navy is doing on a project, an explanation of current available information or results, and a brief discussion of future plans. Fact sheets should include point-of-contact information.

Providing fact sheets to the public can help encourage more productive dialogue and bring questions and concerns to light early in the process when they are easiest to address. Fact sheets can be distributed to the RAB, mailed to special installation restoration lists to target affected stakeholders, and prepared for general distribution to the public prior to and during public meetings. Providing information early and often is a good way to increase community members' confidence that you are being open and honest with information. It may also help alleviate concerns and reduce the need for optional public meetings. When a public meeting is required or needed, providing information in advance

helps community members feel more comfortable with new information and feel confident that they have formulated good questions before coming to the meeting.

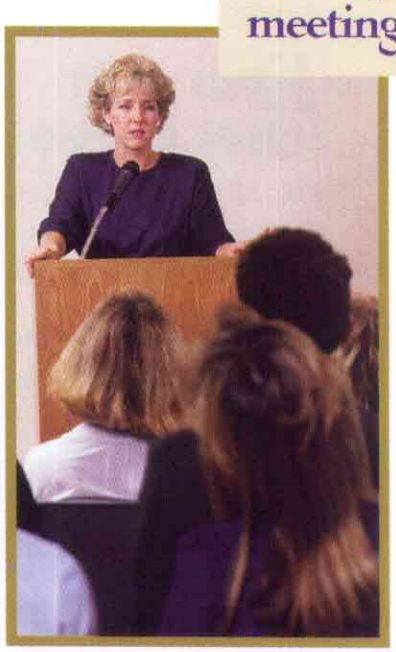
Use the power of the Web

The Internet is a powerful resource for communicating with the public about how Navy environmental restoration programs are addressing risks and cleaning up sites. As part of an installation Web site, your project team could maintain an environmental cleanup page to provide the public with key messages, risk assessment results, fact sheets, action plans, and status reports. Including an online capability to enable the public to ask questions or make comments brings an interactive dimension to your Web site. Posting fact sheets and other risk communication materials to your Web site is also another good way to prepare the public for public meetings. Don't forget to publicize your Web site's address on the other more traditional communication materials going out to the public.

Avoid town hall–style meetings

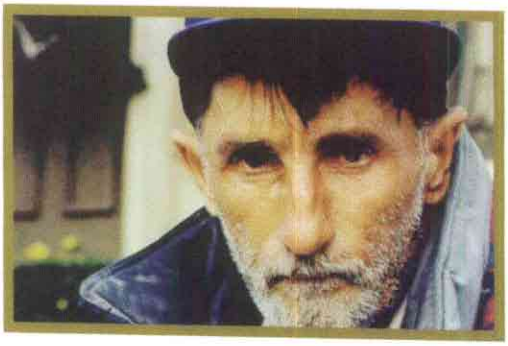
Meet the public

While there are various public meeting settings for engaging the public and sharing your risk messages, NEHC recommends the open house venue. This less formal arrangement enables community members to circulate through various stations where they can gather information, view posters, and talk one on one with agency representatives.



NEHC advises against town hall–style meetings involving one expert or a panel of experts providing information in a formal presentation to the audience usually followed by questions from the public. NEHC experience finds the town hall meeting format counterproductive, opening opportunities for a few disgruntled audience members to sabotage your agency's ability to communicate effectively with stakeholders. Following are some drawbacks to town hall meetings:

- Attendees may be reluctant to ask questions in front of a large group of people.
- Attendees may feel it is an unproductive meeting if they want a higher level of technical detail than is covered or if they need more personal explanation to help them understand technical facts.
- Some attendees may miss the particular information they seek by arriving late or leaving early.
- Long town hall meetings tax the attention span of attendees, possibly leading them to miss vital information.
- Activists have a chance to wrest control of the meeting from you.
- Particularly angry or frustrated attendees can "gang up" on you, making it difficult to get the meeting back on track.



If your organization feels a formal oral presentation is needed for your project or issue, then don't rely solely on the town hall format. Consider providing a brief presentation followed by an open house poster session. With this combined format, the presentation should be no more than 15–20 minutes and focus on your key messages. Let people know that you will hold a brief question-and-answer session. Tell them the time allowed for the questions and answers and encourage them to stay afterward to get their questions answered one on one by the group of experts that you have assembled at the poster stations.

Regardless of the format, when planning a public meeting, set up a process for collecting public comments.

Deal with upset people

One of the hardest parts of conducting a public meeting is the need for technical people to deal with emotional issues or health risk questions that cannot be answered by a risk assessment. Stakeholders want to share their concerns and air their opinions. Spokespeople need to listen respectfully and with empathy to a range of possible opinions and be able to respond without defensiveness as to what your agency is doing to reduce risks. In contentious situations, members of the public are most interested in having their concerns heard and considered. They may not be in a mood to listen to you until they have had their say. A strong grounding in risk communication training will help your team meet the challenge of dealing with concerned stakeholders.

While putting risk communication principles into practice can help

Prepare for a public meeting

- Review and categorize feedback from previous meetings.
- Develop a checklist of likely concerns and questions based on your agency's experience. For example, be ready to discuss how the timing of your project's funding is affected by Navy budget cycles.
- Break the questions/answers list down into categories based on the information you plan to disseminate at various poster stations. For example, your question categories might include site history, risk assessment planning and process, risk assessment results, risk management decisions, and chemicals of concern. Encourage experts to be prepared to answer questions that pertain to their poster information and to direct other questions to experts at other poster stations.
- If you know a difficult issue is going to come up, be prepared to address it head on. Be the first to acknowledge recent negative events, rumors, "bad" press, or accusations, and be ready to say what you are doing about the situation.
- Develop key messages and select and produce graphics and visual displays (i.e., posters) to effectively support your key messages.
- Prepare and practice any presentations and/or answers to tough questions. Role playing among team members is a good way to anticipate and prepare answers to questions various stakeholders might pose.

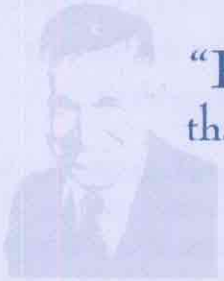
NEHC is available to help you plan, coordinate, and execute a public meeting.

you avoid many pitfalls in your efforts to inform and engage the public in a constructive dialogue on risks, there will inevitably be occasions when you are called upon to deal with people at public meetings or other venues who are upset or angry about the way the Navy has proposed to deal with a risk issue. In these situations, the following tips may prove helpful:

1. Allow people time to vent. Don't interrupt while someone is expressing opinions/emotions or making a point.
   - Read people's nonverbals—their body language and voice.
   - If they don't stop their emotional-type speech, interject a calming type statement: "I'd be upset too if I were in your situation. I would like to help you...."
   - If a person doesn't stop venting during a formal presentation or question-and-answer session, you could suggest that, in order to let others have an opportunity to speak, you'll follow up with him or her later.

2. Determine the person's underlying concern, then restate the content or feeling to demonstrate your understanding.
   - "So what you experienced was...."
   - "It's important that I understand your situation. Can you tell me...."
   - "How can I do a better job to...?"

3. Be empathetic—Indicate that you understand where they're coming from but avoid phony identification. You are not them. Empathy is not agreement or pity.
   - "I have asked myself that same question."
   - "I can understand why...."
   - "I live in this community too, and I've asked myself those same questions."
   - "I can see why you are concerned about...."



"People want to know that you care before they care about what you know."

Will Rogers
American humorist and writer

4. Make your point or conclusion.
   - Keep your major point or message positive and simple (15 words or less).
   - You may find it difficult to cut to the chase and deliver your major message first without first presenting your facts, but this sequence is recommended so the audience knows where you are headed.

5. Provide facts to support your major point or conclusion.
   - Never provide more than three supporting facts. (Hold the other facts in your "fact bank.")
   - Use other credible parties who support your presentation of the facts.
   - In explaining complex risk data, use analogies, compare risks to standards, and present effective graphics or visuals that your audience can relate to.

6. Discuss next steps.
   - Agree on the date, time, and place of the next meeting.
   - Provide other information sources.
   - Explain any "who," "what," or "when" for further actions.
   - Follow up on questions and comments.

Avoid trust busters

It's vitally important to demonstrate to the public that you take their concerns about risks seriously. Instead of saying, "That is not a problem," a much better response would be, "That is an important issue, and here are the steps we are taking to ensure safety." Research shows that people believe technical expertise is only a small part of what makes a risk communicator credible. Far more important qualities are empathy and caring.

When you meet and discuss risk issues with the public, be sure you maintain a positive, friendly tone. The public often prejudges federal government personnel as arrogant, patronizing, condescending, uncaring, and defensive. Don't feed that stereotype with comments like these:

- "Calm down."
- "I can't understand you when you shout."
- "You're wrong about that part because...."
- "We couldn't have done that because...."
- "You don't seem to understand...."

Be aware of your nonverbal signals—As important as what you say is how you say it and your body language. The public will be very adept at reading any negative signals you may be sending via your posture or eye and hand movement or positioning. Try to avoid obviously negative nonverbals, such as rolling eyes, clenched fists, hands on hips, slouching, or an overly rigid posture.

Don't make promises you can't keep—As you explain to the public the measures your agency is undertaking to better understand and reduce risks, don't be pressured to promise more than you can deliver. If you cannot take certain measures—for example, because they are too expensive, they are against the law, or the Navy does not sanction them—you are better off saying so. Unkept promises can destroy credibility.

Other trust busters—During interactions with the public, avoid attitudes and expressions that suggest you have all the answers, are unwilling to be totally honest and frank, are defensive about your risk management strategy, or are attempting to manipulate the public's perception of risk. The following expressions and attitudes should be avoided:

Push backs are retorts that suggest you are putting the responsibility on members of the public to prove their point or resolve an issue:

- "Could you be clearer?" Instead say, "I'm not sure I understand. Can you tell me more?"
- "What you need to know is...." Instead say, "We have additional information here...."
- "That's news to us." Instead say, "I wasn't aware of that. I'll look into that further and get back with you."

Long-windedness will put people off when they feel you've already made your point and further explanation on your part is unnecessary and unwelcome. Don't weaken your messages by belaboring them.

Using humor may suggest to the public that you are insensitive to issues of vital importance to the community.

Distant, abstract, and unfeeling language about death, injury, and illness sends the message that you don't care about people as individuals.

Using jargon and undefined acronyms may lead people to suspect that you are being deceptive and evasive.

Being defensive is natural when the public is questioning your honesty or challenging your efforts, but don't take the bait! Think before you speak, and avoid statements like these:

- "You've got it wrong. That's not what we're doing."
- "Just give me a chance to explain."
- "If I can get a word in here, I want to tell you what we are really doing."

Conclusion

The key to effective communication with the public about the risk assessment process and risk results is building and maintaining trust. If you and your organization enjoy good relations with the community and are generally perceived to be good neighbors, your risk messages have a greater likelihood of being accepted. Your awareness of the importance of maintaining good community relations helps you become proactive in seeking community involvement in your risk communication planning. The community is more likely to trust your assessment of risks if you've sought public input early and often throughout the risk assessment process and have been willing to share an honest assessment of the risks with stakeholders.

NEHC can help

The Navy Environmental Health Center (NEHC), Environmental Programs Directorate can help you conduct accurate, defensible risk assessments and communicate the process and results more effectively to stakeholders. Services in support of the Navy/Marine Corps Installation Restoration or the Naval Facilities Engineering Command Base Realignment and Closure (BRAC) programs are free of charge. NEHC can help you do the following:

- prepare and/or review risk assessment plans and documents;
- develop community relations plans and site- or issue-specific risk communication plans;
- profile the community;
- develop key messages and lists of anticipated questions and answers;
- develop and produce posters, fact sheets, advertisements, and press releases;
- plan and coordinate public meetings;
- evaluate presentation skills of your messengers; and
- prepare presenters or poster experts to deal with angry or upset people and to answer tough questions.

Contact NEHC at (757) 953-0932 to request assistance, or go to the NEHC Web site (http://www-nehc.med.navy.mil) or the Environmental Programs Directorate home page (http://www-nehc.med.navy.mil/ep/index.htm) for more information.

Bibliography and other helpful resources

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